

GROWN UP™ ...

A Newsletter For Those Who Care For ADOLESCENTS, ADULTS AND AGING ADULTS

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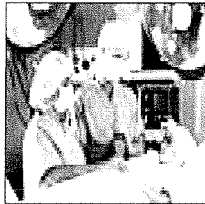
© POPULATION-SPECIFIC PRE-OP CONSIDERATIONS

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Behavioral Objectives: After reading this newsletter the learner will be able to:

1. Discuss population-specific pre-op assessment, including physical and psychosocial well-being, as well as identification of existing health problems.
2. Describe population-specific guidelines regarding informed consent.

The preoperative period begins when the decision to have surgery is made and ends when the patient is transferred to the operating room. The nursing activities associated with this phase include physical assessment of the patient, identifying health problems, psychosocial assessment, witnessing informed consent and providing preoperative teaching for the patient and family.



This newsletter will discuss the role of the healthcare professional in assessing the patient, physically and psychosocially. Identification of existing health problems, the essentials of informed consent and pre-op teaching will also be reviewed.

PRE-OP ASSESSMENT OF THE PATIENT:

Physical: A physical assessment should be performed and documented pre-operatively. This provides baseline data for comparison during surgery and in the postoperative phase. Any abnormalities should be documented and reported. Many facilities have a pre-op check-list to guide this assessment, as well as to insure the patient's safety, such as checking for allergies, loose teeth or caps, and insuring that a patient's ID band is in place and

intact.

Before the patient is transferred to the OR a set of vital signs should be obtained. Special attention should be given to hypertension, an irregular heart beat, tachypnea and hyperthermia. Abnormalities, not previously assessed, should be reported immediately. Except for hyperthermia, increases in vital signs may indicate cardiovascular disease, which is increasingly prevalent in the general population. Cardiovascular disease may put the surgical patient at risk for anesthetic complications, stroke, thrombophlebitis and heart failure.

Respiratory status should also be assessed prior to surgery. General anesthesia can adversely affect pulmonary function, as well as predispose the patient to postoperative lung infections. Additionally, smoking causes blood vessel constriction and increased secretions. The carbon monoxide in smoke binds with hemoglobin, decreasing tissue oxygenation. Assessing the patient's smoking history is important. Adolescents may be more likely to be truthful if asked about smoking in private.

The patient should also be assessed for adequate renal function. Renal disease or insufficiency can alter the body's ability to excrete waste products, medications and anesthetic agents. Patients with a history of renal disease are at high risk for problems with fluid and electrolyte balance. Diuretics add to this risk. An evaluation of the patient's neurological status, including level of consciousness and orientation, should be performed. Elderly patients should also be assessed for dementia, as well as sensory deficits, such as problems with vision or hearing. Hearing loss has been identified in 33% to 50% of persons 65 years and older. Declines in sensory function, or the



presence of dementia, can affect aging adults' ability to understand. The patient's nutritional status should also be assessed, pre-operatively, by comparing weight with gender and height. An estimated 50% of hospitalized patients have some degree of malnutrition, with aging adults being at highest risk. Malnutrition can lead to delayed wound healing, infection and reduced energy. Pre-op nutritional supplementation may be needed.

Identifying Health Problems:

Of post-op deaths, 75% occur in the elderly population. Although elderly patients are greater surgical risks than adolescents and adults, surgery is never without risks. Identifying existing health problems, pre-operatively, is an essential role of the healthcare professional. For example, regardless of the age of the patient, diabetes mellitus predisposes the patient to wound infection and delayed healing. Stress, nothing-by-mouth (NPO) status, anesthesia, tissue trauma and reduced postoperative activity are all factors that affect regulation of blood glucose levels.

Additionally, obesity can lead to hypertension, impaired cardiac function and impaired respiratory ventilation. Obese patients are also more likely to have delayed wound healing and wound infection. Adipose tissue impedes blood circulation and the delivery of nutrients, antibodies and enzymes required for wound healing. During surgery, fluctuations of vital signs are more common in the obese patient, resulting from the excessive demands on the cardiovascular system. Trauma to the tissues is more common, as the surgeon must exert more traction on the fatty tissue to expose the surgical site.

A chronic respiratory condition, such as asthma, as well as COPD, causes pulmonary changes that impede airflow.

Such conditions can cause problems post-operatively, such as pneumonia.

Depression and alcohol abuse often go unrecognized in patients of all ages. Both can affect postoperative outcomes for the patient, and therefore need to be assessed in the preoperative period.

Psychosocial: Surgery is a unique experience for each patient.

Although some operations are considered minor procedures by hospital personnel, surgery is always a major experience for the patient.



Signs of anxiety in the pre-surgical patient are common. Fear of the unknown, the effectiveness and/or findings of surgery, as well as alterations in body image, are common stressors.

Adolescents are particularly concerned with having a surgical scar, even from an appendectomy, which will make them "different" from their peers. Likewise, for women undergoing surgery for breast cancer, fear of mutilation, as well as an uncertain prognosis, are common.

Previous surgical experiences may either allay or increase anxiety. Often, surgery in adolescence and young adulthood is a first time experience.

Highly anxious patients may talk rapidly, ask many questions without waiting for answers, repeat the same questions or change topics frequently. Some patients will not talk about the surgery, responding only in monosyllables, whereas others may cry or display anger, both behaviors of anxiety and fear. Physical signs of anxiety include increased pulse and respiratory rate, moist palms, constant hand movements and restlessness. Changes in sleep patterns, such as insomnia, also can provide clues about increased anxiety.

Prolonged anxiety may lead to increased protein breakdown, decreased wound healing, increased risk of infection, altered immune response and fluid and electrolyte imbalances. In the elderly, anxiety, as well as other factors, including an unfamiliar environment, hypoxia, electrolyte imbalance, dehydration and certain medications, may cause confusion.

INFORMED CONSENT

Informed consent is an agreement by a

patient to accept the surgical procedure.

Consent can only be given after complete information, including the risks of treatment and facts relating to it, has been provided to the patient and understood. Although the surgeon maintains legal responsibility for insuring that the patient is giving informed consent, the healthcare professional may witness the patient's signature on the consent form. In doing so, the healthcare professional should insure that the patient understands the procedure to be performed. Asking questions, such as "Explain to me what you're going to have done", are helpful. Informed consent is only possible when the patient understands the information being provided. Explanations should be given clearly, limiting medical jargon. And, if the patient does not speak English, an interpreter must be acquired. In the United States 20% of adults are illiterate. If the patient is unable to read, the consent form must be completely read to them. In a life-threatening emergency, if consent cannot be obtained from the patient or a relative, then the law generally agrees that consent is implied. It's important to remember, consent can be withdrawn at any time, for any reason.



Many state legislatures have adopted laws (statutes) that address issues of informed consent. Healthcare professionals must understand statutes in the jurisdiction in which they practice. There are, however, some general principles associated with informed consent that are generally applicable to all states. When caring for adolescents, the age of majority is especially important and state laws differ with regard to this. Although some variation still exists, in most states, children become adults on their eighteenth birthday and a parent or guardian must give consent before minors have surgeries. However, certain groups of minors are often legally permitted to provide their own consent for surgery. These include those who are married, pregnant, parents, members of the military or emancipated—living on their own. These statutes, however, vary by state. Even before the age of majority, statutes in many states permit minors to give consent on their own behalf for certain treatments, such as for pregnancy, sexually transmitted diseases and drug or alcohol treatment.

Consent must be given by an individual

with the capacity and competence to understand.

A competent adult is a person over 18 years of age who is conscious and oriented. Any patient who is confused, intoxicated, disoriented, sedated, mentally ill or mentally retarded is not considered competent. Likewise, elderly patients who are confused or have dementia, are not competent to give consent. For persons who are unable to give informed consent or who are unconscious or injured in such a way that they are unable to give consent, consent is usually obtained from the closest adult relative, if existing statutes permit.



PRE-OPERATIVE TEACHING

Patients need to be aware of what to expect before surgery, as well as post-operatively. This will help allay anxiety and increase cooperation. Pre-op teaching should begin as soon as possible, allowing time for patients to ask any questions. Routines and procedures, such as pre-op lab work, being NPO, placement of a foley catheter, if required, preoperative medication and the presence of IV's, are examples of teaching priorities prior to surgery. Sensations the patient will feel, such as anesthesia effects, including feelings of drowsiness and a dry mouth, should be explained. Pain, including the possibility of nausea and a sore throat following general anesthesia, as well as incisional pain, should also be discussed. The patient should be reassured his or her pain will be managed fully. Likewise, what is expected post-operatively, such as coughing and deep breathing exercises, splinting of an incision, ambulation and diet advancement, should be discussed. Home care needs should be assessed and implemented before discharge.

All surgical procedures involve risks. The healthcare professional plays an essential role in identifying physical or existing health problems before surgery that may increase a patient's surgical risk. Assessing the patient's feelings regarding surgery, being certain the patient is informed and

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